

Roy F. Weston, Inc.
Building 3701
Barnum Road
Fort Devens, Massachusetts 01433
508-772-7190 • Fax 508-772-7251

Mailing Address: Roy F. Weston, Inc. P.O. Box 425 Ayer, Massachusetts 01432-0425

Superfund Records Center

. edi

15 April 1999 Work Order No. 03886-118-002-2700

Mr. Maurice Beaudoin, Resident Engineer Department of the Army New England District, Corps of Engineers New Bedford Resident Office 103 Sawyer Street New Bedford, MA 02746

Reference:

Contract No. DACW33-95-D-0004

Delivery Order No. 0002

New Bedford Harbor Superfund Site

Sawyer Street Site O & M DCN: NBH-041599-AAPH

Subject:

Quarterly Groundwater Sampling Results - Fourth Quarter 1998

Dear Mr. Beaudoin:

This is a Letter Report summarizing quarterly groundwater sampling activities and results at the New Bedford Harbor Sawyer Street Site. Seven on-site groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4A, MW-5, MW-6, and MW-7A) were sampled on 21 December 1998. The attached Site Plan shows the locations of on-site monitoring wells. Table 1 summarizes the groundwater samples collected. Table 2 summarizes the final field parameters measured at each location after well purging, but prior to sample collection. Table 3 summarizes the analytical results of the sampling.

As shown on Table 3, no dissolved or total concentrations detected in MW-1 Duplicate and MW-3 were found at, or exceeding, any applicable U.S. EPA Maximum Contaminant Level (MCL) regulatory guidelines or any Massachusetts Contingency Plan (MCP) Standards. Based on the matrix spike/matrix spike duplicate (MS/MSD) samples not meeting quality control criteria for lead, all lead results were estimated (J/UJ) due to poor matrix spike recoveries. Data validation notes and the laboratory data transmittals for the 21 December 1998 groundwater sampling results are attached.

During the groundwater sampling event on 21 December 1998, the depression area located east of the Confined Disposal Facility (CDF) contained various areas of standing. Monitoring wells MW-2 and MW-3 are located in this area. No standing water was observed in the vicinity of



Mr. Maurice Beaudoin U.S. Army Corps of Engineers 2

04/15/99

these two wells. The depression area is utilized as a discharge area for rain water, which accumulates on the covers of CDF cells.

Please call me at (978) 772-7190, if you have any questions regarding this Letter Report.

Very Truly Yours,

ROY F. WESTON, INC.

Alexander Easterday

Senior Geologist

AE/xx

ce: R. Rico (WESTON)

D. Abrahamson [WESTON DCN File (2)]

M. Otis (CENAE)
Project File (DVN)



Where quality is a science:

January 20, 1999

Mr. Al Easterday Roy F. Weston One Wall Street Manchester, NH 03101-1501

Dear Mr. Easterday:

Upon further review of the data for Lancaster Laboratories Sample Nos. 3062407-3062430, it was found that these samples were analyzed according to EPA SW-846 7421 protocol and not analyzed according to Army Corps of Engineers protocol which requires a post digest spike be performed on each sample. The samples were reanalyzed by Army Corps of Engineers protocol and the new reports are included with this letter.

I hope this has not resulted in any inconvenience. If you have any questions, please report date 1/22

call me at 717-656-2300, Ext. 1207.

Sincerely.

Robert Strocko, Jr. B.S

Group Leader

Metals

RS/kw Enclosure







Page: 1 of

LLI Sample No. WW 3062407 Collected: I2/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

001-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

001-- SDG#: NBH06-01

CAT

NO. ANALYSIS NAME

1749 Cadmium 1751 Chromium 1753

Copper 1055 Lead (furnace method)

0173 PCBs in Water

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

N.D. 0.0017 mg/] N.D. 0.0054 mg/l N.D. 0.0058 mg/1 0.00375 0.0019 mq/1

See Page

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:02:33 D 0002 24 at (717) 656-2300 REP 135166 646255 288 15.00 00020200 ASR000







P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of

LLI Sample No. WW 3062407 Collected: 12/21/98 at 10:25 by AE

Discard:

1/30/99

Submitted: 12/23/98 Reported: 1/22/99

001-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

001-- SDG#: NBH06-01

ANALYSIS NAME

AS RECEIVED

N.D.

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

NO.

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260

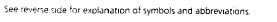
N.D. 0.097 ug/1 N.D. 0.097 ug/1

0.097

ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300





LABORATORY CHRONICL

Page: 3 of 3



LLI Sample No. WW 3062407 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98

001-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

001-- SDG#: NBH06-01

| 1749 Cadmium SW-846 6010B | CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|--|--------------|------------------------------|------------------------------|------------------|--------------------------------|--|
| 1055 Lead (furnace method) SW-846 7421 2 01/19/99 0841 Heidi L. Strausser 12/28/98 1815 Marie D. Kimmel 0173 PCBs in Water SW-846 8082 1 12/29/98 1952 Rick Shober | 1751 1753 | Chromium Copper | SW-846 6010B SW-846 6010B | 1 1 1 1 | 12/29/98 2050 12/29/98 2050 | Christine R. Fritz Christine R. Fritz |
| 0817 Water Sample Pest Extraction SW-846 35100 1 12/29/98 1952 Rick Shober | 5704 | WW/TL SW 846 GFAA Digest tot | | 2 1 | 01/19/99 0841 | Heidi L. Strausser |
| | | | SW-846 8082 SW-846 3510C | 1 | | |







Page: 1 of

LLI Sample No. WW 3062408 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

001-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

001F- SDG#: NBH06-02

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED CAT METHOD NO. ANALYSIS NAME RESULTS DETECTION LIMIT UNITS 1749 Cadmium N.D. 0.0017 mg/1 1751 Chromium N.D. 0.0054 mg/1 1753 Copper mg/l N.D. 0.0058 1055 Lead (furnace method) N.D. UJ1 0.0019 mg/10173 PCBs in Water See Page 2

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:03:23 D 0002 at (717) 656-2300 24 135166 646255 288 15.00 00020200 ASR000





Page: 2 of

LLI Sample No. WW 3062408 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

001-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

001F- SDG#: NBH06-02

CAT

NO. ANALYSIS NAME

PCBs in Water

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 PCB-1248 PCB-1254 0643 0644 0645 PCB-1260

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD **RESULTS** DETECTION LIMIT UNITS

| N.D. N.D. N.D. N.D. | 0.10 0.10 0.10 0.10 | ug/] ug/] ug/] ug/] |
|------------------------------|------------------------------|------------------------------|
| N.D. | 0.10 | ug/] |
| N.D. | 0.10 | ug/1 |
| N.D. | 0.10 | ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



LABORATORY CHRONICL

Page: 3 of 3



LLI Sample No. ww 3062408 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98

001-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 001F- SDG#: NBH06-02

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|-----------|-------------------------------|--------------|-------|------------------------------|------------------------|
| 1749 | Cadmium | SW-846 6010B | 1 | 12/29/98 2231 | Donna R. Sackett |
| 1751 | Chromium | SW-846 6010B | 1 | 12/29/98 2231 | |
| 1753 | Copper | SW-846 6010B | 1 | 12/29/98 2231 | |
| 1848 | WW SW846 ICP Digest (tot rec) | SW-846 3005A | 1 | 12/28/98 2312 | |
| 1055 | Lead (furnace method) | SW-846 7421 | 2 | 01/15/99 1400 | Julie A. Slaughenhoupt |
| 5704 | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 0202 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | | 12/28/98 0700 | Nathaniel R. Kurtz |



Page: 1 of 3

LLI Sample No. WW 3062409 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

101-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

101-- SDG#: NBH06-03

CAT

NO. ANALYSIS NAME

1749 Cadmium

1751 Chromium 1753 Copper

1055 Lead (furnace method)

0173 PCBs in Water

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD **RESULTS** DETECTION LIMIT UNITS

N.D. 0.0017 mg/l N.D. 0.0054 mg/1N.D. 0.0058 mg/l 0.0031丁1 0.0019 mg/1

See Page 2

1 COPY TO 1 COPY TO Roy F. Weston, Inc. Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 P 135166 646255 Tan H. Vo 04:04:06 D 0002 24 REP 288 15.00 00020200 ASR000









Page: 2 of 3

LLI Sample No. ww 3062409 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

101-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

101-- SDG#: NBH06-03

CAT

NO. ANALYSIS NAME

PCBs in Water

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 PCB-1248 PCB-1254 0643 0644 0645 PCB-1260

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD

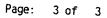
RESULTS DETECTION LIMIT UNITS

| N.D. N.D. N.D. N.D. N.D. N.D. N.D. | 0.096 0.096 0.096 0.096 0.096 0.096 | ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 |
|--|--|--|
|--|--|--|

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



LABORATORY CHRONICL





LLI Sample No. WW 3062409 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98

101-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 101-- SDG#: NBH06-03

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANAL ID | YSIS DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|------------|--------------------------------|---|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 2054 12/29/98 2054 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| 1055 5704 | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | 01/19/99 0850 | Heidi L. Strausser Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | | 12/29/98 2009 12/28/98 1000 | Rick Shober Lisa J. Cooke |

P.O. LL-2139-A7

Rel. 03886-118-002



Page: 1 of

LLI Sample No. WW 3062410 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99 Discard: 1/30/99

Discard: 1/30/99

101-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

Lead (furnace method)

101F- SDG#: NBH06-04

ANALYSIS NAME

PCBs in Water

Cadmium

Copper

Chromium

CAT

NO.

1749

1751

1753

1055

0173

AS RECEIVED

METHOD

RESULTS DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

N.D. 0.0017 mg/] N.D. 0.0054 mg/1N.D. 0.0058 mg/l N.D.UT 0.0019 mg/1

See Page 2

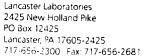
This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300 04:04:45 D 0002 24 135166 646255 288 15.00 00020200 ASR000







P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of 3

LLI Sample No. WW 3062410 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

101-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

101F- SDG#: NBH06-04

ANALYSIS NAME

AS RECEIVED

N.D.

N.D.

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

NO.

PCB-1016 0639 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 PCB-1254 0644 0645 PCB-1260

N.D. 0.095 ug/1 N.D. 0.095 ug/1 N.D. 0.095 ug/1 N.D. 0.095 ug/1 N.D. 0.095 ug/1

0.095

0.095

ug/1

ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



LABORATORY CHRONICI

Page: 3 of 3



LLI Sample No. WW 3062410 Collected: 12/21/98 at 10:25 by AE

Submitted: 12/23/98

101-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 101F- SDG#: NBH06-04

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYCT |
|------------------------------|--|--|------------------|---|--------------------------------------|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2236 12/29/98 2236 12/29/98 2236 | Donna R. Sackett Donna R. Sackett |
| 1055 5704 0173 | Lead (furnace method) WW/TL SW 846 GFAA Digest tot PCBs in Water | SW-846 7421 SW-846 3020A | 2 | 01/15/99 1410 | Julie A. Slaughenhount |
| | Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | 12/30/98 0219 12/28/98 0700 | Rick Shober Nathaniel R. Kurtz |







Page: 1 of

LLI Sample No. WW 3062411 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

002-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

002-- SDG#: NBH06-05

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

CAT METHOD NO. ANALYSIS NAME RESULTS DETECTION LIMIT UNITS 1749

Cadmium N.D. 0.0017 1751 Chromium mg/l N.D. 0.0054 1753 mg/1 Copper N.D. UJ 0.0058 1055 Lead (furnace method) mg/l 0.0095 The quantitation limit for lead was increased mg/1

due to the nature of the sample matrix.

0173 PCBs in Water See Page

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:05:31 D 0002 at (717) 656-2300 135166 646255 24 288 15.00 00020200 ASR000

MEMBER



Page: 2 of 3

LLI Sample No. ww 3062411 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

002-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

002-- SDG#: NBH06-05

CAT NO. ANALYSIS NAME

PCBs in Water

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

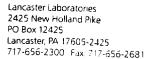
AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

| N.D. N.D. N.D. N.D. N.D. N.D. N.D. | 0.095 0.095 0.095 0.095 0.095 0.095 0.095 | ug/] ug/] ug/] ug/] ug/] ug/] |
|--|---|--|
|--|---|--|

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300







LABORATORY CHRONICL

Page: 3 of 3



LLI Sample No. WW 3062411 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98

002-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 002-- SDG#: NBH06-05

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|--------------------------------|--|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2107 | Christine R. Fritz Christine R. Fritz Christine R. Fritz |
| 1055 5704 | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | 01/15/99 2144 | Jolene M Schields |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | 12/29/98 2026 12/28/98 1000 | Rick Shober Lisa J. Cooke |





Page: 1 of 3

LLI Sample No. WW 3062412 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

002-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

002F- SDG#: NBH06-06

CAT

NO.

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED ANALYSIS NAME

METHOD RESULTS DETECTION LIMIT UNITS

1749 Cadmium N.D. 0.0017 1751 mg/l Chromium N.D. 0.0054 mg/l 1753 Copper N.D. UJ \ 0.0058 N.D. UJ \ 0.0095 1055 mg/1Lead (furnace method) mg/1

The quantitation limit for lead was increased due to the nature of the sample matrix.

0173 PCBs in Water See Page

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300 135166 646255 04:06:15 D 0002 24 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681





Page: 2 of 3

LLI Sample No. WW 3062412 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

002-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

002F- SDG#: NBH06-06

CAT NO. ANALYSIS NAME

PCBs in Water 0639 PCB-1016

0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 PCB-1248 0643 0644 PCB-1254 0645 PCB-1260

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

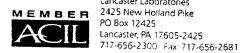
AS RECEIVED

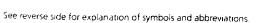
METHOD RESULTS DETECTION LIMIT UNITS

| N.D. N.D. | 0.098 0.098 | ug/1 ug/1 |
|--------------|----------------|--------------|
| N.D. | 0.098 | ug/1 |
| N.D. | 0.098 | ug/1 |
| N.D. | 0.098 | ug/1 |
| N.D. | 0.098 | ug/l |
| N.D. | 0.098 | ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

Lancaster Laboratories





LABORATORY CHRONICLE



Page: 3 of 3

LLI Sample No. WW 3062412 Collected: 12/21/98 at 15:20 by AE

Submitted: 12/23/98

002-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

002F- SDG#: NBH06-06

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|------------------------------|--|--|-------------|--|------------------------|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 | 12/29/98 2249 12/29/98 2249 12/29/98 2249 12/28/98 2312 | Donna R. Sackett |
| 1055 | Lead (furnace method) | SW-846 7421 | 2 | 01/18/99 1126 | Julie A. Slaughenhoupt |
| 5704 | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | 12/28/98 2312 | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 0310 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | | 12/28/98 0700 | Nathaniel R. Kurtz |





Page: 1 of

LLI Sample No. WW 3062413 Collected: [2/21/98 at 15:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

003-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

003 -- SDG#: NBH06-07

ANALYSIS NAME

CAT

NO.

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

1749 Cadmium 0.0022 J 0.0017 mg/1 1751 Chromium 0.0054 N.D. mg/1 1753 Copper 0.143 0.0058 mq/1N.D. UT 0.0058 1055 Lead (furnace method) mg/l The quantitation limit for lead was increased

due to the nature of the sample matrix. 0173 PCBs in Water

See Page

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:07:03 D 0002 at (717) 656-2300 135166 646255 288 15.00 00020200 ASR000

Lancaster Laboratories 2425 New Holland Pike MEMBER PO Box 12425 Lancaster, PA 17605-2425

717-656-2300 Fax: 717-656-2681





Page: 2 of 3

LLI Sample No. WW 3062413 Collected: 12/21/98 at 15:30 by AE

100 DJ AL

Submitted: 12/23/98 Reported: 1/22/99 Discard: 1/30/99

1, 1,00,33

New Bedford Harbor - MA -USACE

003-1298 Grab Water Sample

003-- SDG#: NBH06-07

PCB-1248

PCB-1254

PCB-1260

0643

0644

0645

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

0.096

0.096

0.096

ug/1

ug/1

ug/1

P.O. LL-2139-A7 Rel. 03886-118-002

| 003 3DOM: NOUNG-U/ | | |
|--|--|---|
| CAT | AS RECEIVED | |
| CAT NO. ANALYSIS NAME | METHOD RESULTS DETECTION LIMIT UNIT: | S |
| PCBs in Water | | |
| 0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 | N.D. 0.096 ug/1 N.D. 0.096 ug/1 N.D. 0.096 ug/1 N.D. 0.096 ug/1 | |

N.D.

N.D.

N.D.

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$$



LABORATORY CHRONICLE

Page: 3 of 3



LLI Sample No. WW 3062413 Collected: 12/21/98 at 15:30 by AE

Submitted: 12/23/98

003-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 003-- SDG#: NBH06-07

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANA ID | YSIS DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|-----------|--------------------------------|---|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 2112 12/29/98 2112 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | | Jolene M. Schields Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | | 12/29/98 2134 12/28/98 1000 | |

P.O. LL-2139-A7

Rel. 03886-118-002



Page: 1 of

LLI Sample No. WW 3062414 Collected: 12/21/98 at 15:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

003-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

003F- SDG#: NBH06-08

ANALYSIS NAME

CAT

NO.

AS RECEIVED METHOD

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

See Page

2

RESULTS DETECTION LIMIT UNITS

1749 Cadmium 0.0024 J 0.0017 1751 Chromium N.D. 0.0054 mg/l 1753 Copper 0.143 0.0058 N.D. UJ 0.0058 mg/11055 Lead (furnace method) mg/1

The quantitation limit for lead was increased

due to the nature of the sample matrix. 0173 PCBs in Water

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 135166 646255 Tan H. Vo 04:07:48 D 0002 24 288 15.00 00020200 ASR000

> Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 17-656-2300 Fax 717-656-2681





P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of

LLI Sample No. WW 3062414 Collected: 12/21/98 at 15:30 by AE

Discard:

Submitted: 12/23/98 Reported: 1/22/99 1/30/99

003-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

003F- SDG#: NBH06-08

ANALYSIS NAME

AS RECEIVED

METHOD **RESULTS** DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

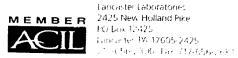
NO.

0639 PCB-1016 0640 PCB-1221 PCB-1232 0641 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260

N.D. 0.096 ug/1 N.D. 0.096

ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300





LABORATORY CHRONICLE



Page: 3 of 3

LLI Sample No. WW 3062414 Collected: 12/21/98 at 15:30 by AE

Submitted: 12/23/98

003-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 003F- SDG#: NBH06-08

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|------------------------------|--|--|-------------|------------------------------|--|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 | 12/29/98 2253 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| 1055 | Lead (furnace method) | SW-846 7421 | 2 | 01/18/99 1136 | Julie A. Slaughenhoupt |
| 5704 | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | 12/28/98 2312 | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 0328 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | | 12/28/98 0700 | Nathaniel R. Kurtz |





Page: 1 of

LLI Sample No. WW 3062415 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

1/30/99 Discard:

CAT

NO.

004-1298 Unspiked Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09BKG

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

METHOD

2

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED ANALYSIS NAME **RESULTS**

DETECTION LIMIT UNITS 1749 Cadmium N.D. 0.0017 mg/1Chromium mg/1 N.D. 0.0054

1751 1753 Copper N.D. 0.0058 mg/11055 N.D. 1 Lead (furnace method) 0.0095 mg/1

The quantitation limit for lead was increased due to the nature of the sample matrix.

0173 PCBs in Water See Page

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:08:33 D 0002 at (717) 656-2300 135166 646255 REP 15.00 00020200 ASR000

Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancarder, PA 17605-2425





Page: 2 of 3

LLI Sample No. WW 3062415 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Unspiked Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09BKG

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

AS RECEIVED

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| CAT NO. | ANALYSIS | NALYSIS NAME RESI | | METHOD DETECTION L | D LIMIT UNITS | |
|--|--|-------------------|--|--|--|--|
| PCBs | in Water | | | | | |
| 0639 0640 0641 0642 0643 0644 0645 | PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 | | N.D. N.D. N.D. N.D. N.D. N.D. | 0.10 0.10 0.10 0.10 0.10 0.10 | ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 | |

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$$







LABORATORY CHRONICLE



Page: 3 of 3

LLI Sample No. WW 3062415 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Unspiked Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09BKG

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANAL ID | YSIS DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|------------|--------------------------------|---|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 1931 12/29/98 1931 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| 1055 5704 | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | | Jolene M. Schields Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | | 12/31/98 0727 12/28/98 1000 | Rick Shober Lisa J. Cooke |







Page: 1 of

LLI Sample No. WW 3062416 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

1/30/99

Discard:

004-1298 Unspiked Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10BKG

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED CAT METHOD NO. ANALYSIS NAME **RESULTS** DETECTION LIMIT UNITS 1749 Cadmium 0.0017 N.D. 1751 Chromium N.D. 0.0054 mg/11753 Copper N.D. 0.0058 mg/l 1055 N.D. US Lead (furnace method) 0.0095 mg/1 The quantitation limit for lead was increased due to the nature of the sample matrix. 0173 PCBs in Water See Page 2

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:09:24 D 0002 at (717) 656-2300 135166 646255 REP 288 15.00 00020200 ASR000









Page: 2 of 3

LLI Sample No. WW 3062416 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99 1/30/99 Discard:

004-1298 Unspiked Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10BKG

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| CAT | AS RECEIVED | | | | |
|---|--|--|--|--|--|
| NO. ANALYSIS NAME | RESULTS | METHOD DETECTION LIN | AIT UNITS | | |
| PCBs in Water | | | | | |
| 0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260 | N.D. N.D. N.D. N.D. N.D. N.D. | 0.099 0.099 0.099 0.099 0.099 0.099 | ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 | | |

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$$







LABORATORY CHRONICLE



Page: 3 of 3

LLI Sample No. WW 3062416 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Unspiked Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10BKG

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|----------------------|---|--|------------------|---|--|
| 1749 1751 1753 | Cadmium Chromium | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2205 12/29/98 2205 12/29/98 2205 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | Jolene M. Schields Annamaria Stipkovits |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | 12/30/98 2019 12/28/98 0700 | Rick Shober Nathaniel R. Kurtz |







Page: 1 of

LLI Sample No. WW 3062417 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard:

CAT

NO.

1/30/99

004-1298 Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE

004-- SDG#: NBH06-09DUP

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD ANALYSIS NAME RESULTS **DETECTION LIMIT UNITS**

1749 Cadmium N.D. 0.0017 mg/11751 Chromium N.D. 0.0054 mg/11753 Copper N.D. 0.0058 mg/11055 Lead (furnace method) N.D. UT

The quantitation limit for lead was increased

due to the nature of the sample matrix.

0173 PCBs in Water

0.0095 mg/1

> See Page 2

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 135166 646255 Tan H. Vo 04:10:01 D 0002 24 REP 288

0.00 00000000 ASR000





P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of

LLI Sample No. WW 3062417 Collected: 12/21/98 at 13:15 by AE

Discard: 1/30/99

ANALYSIS NAME

Submitted: 12/23/98 Reported: 1/22/99

004-1298 Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09DUP

AS RECEIVED

N.D.

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

NO.

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 PCB-1242 0642 PCB-1248 PCB-1254 0643 0644 0645 PCB-1260

N.D. 0.097 ug/1 ug/1 N.D. 0.097 N.D. 0.097 ug/1 ug/1 N.D. 0.097 N.D. 0.097 ug/1 N.D. 0.097 ug/1

0.097

ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



LABORATORY CHRONICLE



Page: 3 of 3

LLI Sample No. WW 3062417 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09DUP

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL II | IALYSIS DATE AND TIME | ANALYST |
|-----------|---|-----------------------------|----------|--------------------------|---------------------------------------|
| 1749 | Cadmium | SW-846 6010B | 1 | 12/29/98 1939 | Christine R. Fritz |
| 1751 | Chromium | SW-846 6010B | 1 | | Christine R. Fritz |
| 1753 | Copper | SW-846 6010B | 1 | | Christine R. Fritz |
| 1848 | WW SW846 ICP Digest (tot rec) | SW-846 3005A | 1 | | Marie D. Kimmel |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | Jolene M. Schields Marie D. Kimmel |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/31/98 0817 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | 1 | 12/28/98 1000 | Lisa J. Cooke |



See revenue ade for explanation of symbols and abbreviations



Page: 1 of

LLI Sample No. WW 3062418 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Duplicate Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10DUP

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED CAT METHOD NO. ANALYSIS NAME **RESULTS** DETECTION LIMIT UNITS N.D. 1749 0.0017 Cadmium mg/11751 Chromium N.D. 0.0054 mg/l 1753 Copper N.D. mg/10.0058 N.D. UT 1055 Lead (furnace method) 0.0095 The quantitation limit for lead was increased due to the nature of the sample matrix. 0173 PCBs in Water See Page 2

This sample was field filtered for dissolved metals and PCBs.

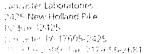
1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 135166 646255 Tan H. Vo 04:10:39 D 0002 RFP 24 0.00 00000000 ASR000 288

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis









Page: 2 of

LLI Sample No. WW 3062418 Collected: 12/21/98 at 13:15 by AE

Discard: 1/30/99

Submitted: 12/23/98 Reported: 1/22/99

004-1298 Duplicate Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10DUP

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

AC DECETVED

Manchester NH 03101-1501

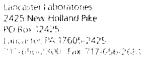
P.O. LL-2139-A7 Rel. 03886-118-002

| | | AS RECEIVED | | |
|------|---------------|---------------------|-------------|--|
| CAT | | METHOD | | |
| NO. | ANALYSIS NAME | RESULTS DETECTION L | STINU TIMI. | |
| PCBs | in Water | | | |
| 0639 | PCB-1016 | N.D. 0.096 | ug/1 | |
| 0640 | PCB-1221 | N.D. 0.096 | ug/1 | |
| 0641 | PCB-1232 | N.D. 0.096 | ug/1 | |
| 0642 | PCB-1242 | N.D. 0.096 | ug/1 | |
| 0643 | PCB-1248 | N.D. 0.096 | ug/1 | |
| 0644 | PCB-1254 | N.D. 0.096 | ug/l | |
| 0645 | PCB-1260 | N.D. 0.096 | ug/1 | |
| | · | N.B. 0.050 | ug/ I | |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs





Page: 3 of 3

LLI Sample No. WW 3062418 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Duplicate Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10DUP

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALY ID | SIS DATE AND TIME | ANALYST |
|--------------|--|--|------------------|-------------|--------------------------------|--|
| 1753 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 2213 12/29/98 2213 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | | Jolene M. Schields Annamaria Stipkovits |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | | 12/30/98 0345 12/28/98 0700 | Rick Shober Nathaniel R. Kurtz |



Page: 1 of 3

LLI Sample No. WW 3062419 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

CAT

004-1298 Matrix Spike Grab Water Sample

New Bedford Harbor - MA -USACE

004-- SDG#: NBH06-09MS

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED METHOD

NO. ANALYSIS NAME RESULTS **DETECTION LIMIT UNITS** 1749 Cadmium 0.052 0.0017 mg/11751 Chromium 0.211 0.0054 mg/11753 Copper 0.258 0.0058 mg/10.0122 J 1055 Lead (furnace method) 0.0095 mg/1

The quantitation limit for lead was increased

due to the nature of the sample matrix.

0173 PCBs in Water See Page 2

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:11:17 D 0002 at (717) 656-2300 135166 646255 REP 288 15.00 00020200 ASR000

Robert Strocko, Jr., B.S. Group Leader, Metals Analysis

Respectfully Submitted







Page: 2 of 3

LLI Sample No. WW 3062419 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Matrix Spike Grab Water Sample

New Bedford Harbor - MA -USACE

004-- SDG#: NBH06-09MS

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

AS RECEIVED

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| | | | | METHOD |
|--|--|------|--|---|
| CAT NO. | ANALYSIS | NAME | RESULTS | DETECTION LIMIT UNITS |
| PCBs i | n Water | | | |
| 0639 0640 0641 0642 0643 0644 0645 | PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 | | 4.00 N.D. N.D. N.D. N.D. 4.10 | 0.10 ug/l |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs

See reverse sign for explanation of symbols and abbreviations





Page: 3 of 3

LLI Sample No. WW 3062419 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Matrix Spike Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09MS

| Accoun | t No: 089 | 947 |
|--------|-------------------|------|
| Roy F. | Weston. | Inc. |
| 1 Wall | Weston, Street | |

Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | | ANALYSIS ID DATE AND TIME | ANALYST |
|--------------|--|--|------------------|--------------------------------|---|
| 1753 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 1944 12/29/98 1944 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | Jolene M. Schields Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | 12/31/98 0743 12/28/98 1000 | |



Page: 1 of

LLI Sample No. WW 3062420 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Matrix Spike Filtered Grab Water Sample

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10MS

| CAT | . 554//. 15/100 10/15 | AS RE | CEIVED METHOD | | |
|------------------------------|--|---------|--------------------------------------|------------------------------|---|
| ÑO. | ANALYSIS NAME | RESULTS | DETECTION LI | MIT UNITS | |
| 1749 1751 1753 1055 | Cadmium Chromium Copper Lead (furnace method) The quantitation limit for lead was indue to the nature of the sample matrix | | 0.0017 0.0054 0.0058 0.0095 | mg/l mg/l mg/l mg/l | |
| 0173 | PCBs in Water | •• | | See Page | 2 |

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO 1 COPY TO Roy F. Weston, Inc. Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:11:57 D 0002 24 at (717) 656-2300 135166 646255 REP 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Lancaster Laboratories 2425 New Holland Pike PO box 12425 Lancaster, PA 17605-2425 17-056-2300 fax 717-656-2681





Page: 2 of 3

LLI Sample No. WW 3062420 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Matrix Spike Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10MS

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| | | | AS | RECEIVED | |
|--------------|----------------------|------|--------------|-----------------------|--------------|
| CAT NO. | ANALYSIS | NAME | RESULTS | METHOD DETECTION L | .IMIT UNITS |
| PCBs | in Water | | | | |
| 0639 0640 | PCB-1016 PCB-1221 | | 4.81 N.D. | 0.10 0.10 | ug/l ug/l |
| 0641 | PCB-1232 | | N.D. | 0.10 | ug/1 |
| 0642 | PCB-1242 | | N.D. | 0.10 | ug/1 |
| 0643 | PCB-1248 | | N.D. | 0.10 | ug/1 |
| 0644 | PCB-1254 | | N.D. | 0.10 | ug/1 |
| 0645 | PCB-1260 | | 4.66 | 0.10 | ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$



Respectfully Submitted Jenifer E. Hess, B.S.





Page: 3 of 3

LLI Sample No. WW 3062420 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

004-1298 Matrix Spike Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10MS

| CAT NO | ANALYSIS NAME | МЕТНОD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|--------------------------------|--|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2218 12/29/98 2218 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| | Lead (furnace method) | SW-846 7421 | 2 | 01/15/99 2218 | Jolene M. Schields |
| | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | 12/28/98 2312 | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 2037 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | | 12/28/98 0700 | Nathaniel R. Kurtz |



Page: 1 of 3

LLI Sample No. WW 3062421 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Matrix Spike Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09MSD

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED CAT **METHOD** ANALYSIS NAME NO. RESULTS DETECTION LIMIT UNITS 1749 Cadmium 0.051 0.0017 mg/10.205 0.251 1751 Chromium 0.0054 mg/l 1753 Copper 0.0058 mg/l 1055 Lead (furnace method) 0.0129 J 0.0095 mg/1The quantitation limit for lead was increased due to the nature of the sample matrix. 0173 PCBs in Water See Page 2

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:12:37 D 0002 24 at (717) 656-2300 REP 135166 646255 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis





Page: 2 of 3

LLI Sample No. WW 3062421 Collected: 12/21/98 at 13:15 by AE

1/30/99 Discard:

Submitted: 12/23/98 Reported: 1/22/99

004-1298 Matrix Spike Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09MSD

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

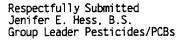
AC DECETVED

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| | | AS REC | PETAER | |
|-----------|----------------------------------|--|--|---|
| | | | METHOD | |
| ANALYSTS | NAME | RESULTS | DETECTION LT | ZTIMI TIM |
| 740121313 | 10 1 12 | NESOE 15 | 0212011011 21 | |
| in Water | | | | |
| III Mater | | | | |
| DOD 1016 | | | | /= |
| LCR-1019 | | 4.04 | 0.10 | ug/1 |
| PCB-1221 | | N.D. | 0.10 | ug/l |
| PCB-1232 | | N.D. | 0.10 | ug/l |
| PCB-1242 | | N.D. | 0.10 | ug/1 |
| | | | | ug/1 |
| | | | | |
| | | | | ug/l |
| PCB-1260 | | 4.15 | 0.10 | ug/l |
| | in Water PCB-1016 PCB-1221 | PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 | ANALYSIS NAME RESULTS in Water PCB-1016 4.04 PCB-1221 N.D. PCB-1232 N.D. PCB-1242 N.D. PCB-1248 N.D. PCB-1254 N.D. | ANALYSIS NAME RESULTS DETECTION LI in Water PCB-1016 4.04 0.10 PCB-1221 N.D. 0.10 PCB-1232 N.D. 0.10 PCB-1242 N.D. 0.10 PCB-1248 N.D. 0.10 PCB-1254 N.D. 0.10 PCB-1254 N.D. 0.10 |

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$$



Two regens insign for explanation of symbols and abbreviations.







Page: 3 of 3

LLI Sample No. WW 3062421 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

004-1298 Matrix Spike Duplicate Grab Water Sample

New Bedford Harbor - MA -USACE 004-- SDG#: NBH06-09MSD

| CAT NO | ANALYSIS NAME | METHOD | | ANALYSIS ID DATE AND TIME ANALYST | |
|--------------|--|--|------------------|---|---|
| 1753 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 1948 Christine R. Fritz 12/29/98 1948 Christine R. Fritz 12/29/98 1948 Christine R. Fritz 12/28/98 1815 Marie D. Kimmel | z |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | 01/15/99 2109 Jolene M. Schields 12/28/98 1815 Marie D. Kimmel | ; |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | 12/31/98 0800 Rick Shober 12/28/98 1000 Lisa J. Cooke | |





Page: 1 of 3

LLI Sample No. WW 3062422 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

004-1298 Matrix Spike Duplicate Filtered Grab

Sample Water

New Bedford Harbor - MA -USACE

004F- SDG#: NBH06-10MSD

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| CAT | AS RECEIVED METHOD | | | | | |
|------------------------------|--|----------------------------------|--------------------------------------|------------------------------|---|--|
| NO. | ANALYSIS NAME | RESULTS | DETECTION LI | MIT UNITS | | |
| 1749 1751 1753 1055 | Cadmium Chromium Copper Lead (furnace method) The quantitation limit for lead was incr | 0.051 0.206 0.257 0.028 | 0.0017 0.0054 0.0058 0.0095 | mg/1 mg/1 mg/1 mg/1 | | |
| 0173 | due to the nature of the sample matrix. PCBs in Water | | | See Page | 2 | |

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

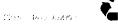
ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300 04:13:14 D 0002 24 REP 135166 646255 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis









Page: 2 of 3

LLI Sample No. WW 3062422 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98 Reported: 1/22/99 Discard: 1/30/99

004-1298 Matrix Spike Duplicate Filtered Grab

Sample Water

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10MSD

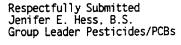
Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

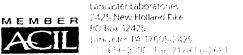
P.O. LL-2139-A7 Rel. 03886-118-002

| | on soull. | NDING TOLDD | AS F | RECEIVED |
|------------------------------|--|-------------|------------------------------|--|
| CAT NO. | ANALYSIS | NAME | RESULTS | METHOD DETECTION LIMIT UNITS |
| PCBs | in Water | | | |
| 0639 0640 0641 0642 | PCB-1016 PCB-1221 PCB-1232 PCB-1242 | | 4.69 N.D. N.D. N.D. | 0.098 ug/1 0.098 ug/1 0.098 ug/1 0.098 ug/1 |
| 0643 0644 0645 | PCB-1248 PCB-1254 PCB-1260 | | N.D. N.D. 4.53 | 0.098 ug/1 0.098 ug/1 0.098 ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300











Page: 3 of 3

LLI Sample No. WW 3062422 Collected: 12/21/98 at 13:15 by AE

Submitted: 12/23/98

004-1298 Matrix Spike Duplicate Filtered Grab

Sample Water

New Bedford Harbor - MA -USACE 004F- SDG#: NBH06-10MSD

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | ANAL' TRIAL ID | YSIS DATE AND TIME | ANALYST |
|--------------|--|--|-------------------|--------------------------------|--|
| 1753 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2222 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 | 01/18/99 1101 12/28/98 2312 | Julie A. Slaughenhoupt Annamaria Stipkovits |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 1 | 12/30/98 2054 12/28/98 0700 | Rick Shober Nathaniel R. Kurtz |





Page: 1 of

LLI Sample No. WW 3062423 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

005-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

005-- SDG#: NBH06-11

CAT

NO. ANALYSIS NAME

1749 Cadmium 1751 Chromium

1753 Copper

1055 Lead (furnace method)

0173 PCBs in Water

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD **RESULTS** DETECTION LIMIT UNITS

> N.D. 0.0017 mg/1N.D. 0.0054 mg/l N.D. 0.0058 mq/1N.D. UT 0.0019 mg/l

See Page

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:13:52 D 0002 24 at (717) 656-2300 REP 135166 646255 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Lancaster Laboratories MEMBER 2425 New Holland Pike PC Box 12425 Tan-Caster, PA 17605-2425 1 (dec./200 for 217-656-268)





Page: 2 of

LLI Sample No. WW 3062423 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

005-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 005-- SDG#: NBH06-11

PCB-1260

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

0.098

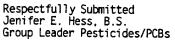
ug/1

P.O. LL-2139-A7 Rel. 03886-118-002

| CAT | | | AS RECEIVED | | | | | | |
|--------------|----------------------|------|--------------|------------------------|--------------|--|--|--|--|
| NO. | ANALYSIS | NAME | RESULTS | METHOD DETECTION LI | MIT UNITS | | | | |
| PCBs | in Water | | | | | | | | |
| 0639 0640 | PCB-1016 PCB-1221 | | N.D. N.D. | 0.098 0.098 | ug/1 ug/1 | | | | |
| 0641 0642 | PCB-1232 PCB-1242 | | N.D. N.D. | 0.098 0.098 | ug/l ug/l | | | | |
| 0643 0644 | PCB-1248 PCB-1254 | | N.D. N.D. | 0.098 0.098 | ug/l ug/l | | | | |
| | | | | | | | | | |

N.D.

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300









Page: 3 of 3

LLI Sample No. WW 3062423 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98

005-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 005-- SDG#: NBH06-11

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

CAT **ANALYSIS** ANALYSIS NAME NO **METHOD** TRIAL ID DATE AND TIME **ANALYST** 12/29/98 2116 Christine R. Fritz 1749 Cadmium SW-846 6010B 1 SW-846 6010B 12/29/98 2116 Christine R. Fritz 1751 Chromium 1 SW-846 6010B 1753 Copper 1 12/29/98 2116 Christine R. Fritz 1 12/28/98 1815 Marie D. Kimmel 1848 WW SW846 ICP Digest (tot rec) SW-846 3005A 1055 Lead (furnace method) 5704 WW/TL SW 846 GFAA Digest tot SW-846 7421 SW-846 3020A 01/15/99 1151 Julie A. Slaughenhoupt 12/28/98 1815 Marie D. Kimmel 2 1 0173 PCBs in Water SW-846 8082 12/31/98 0834 Rick Shober 0817 Water Sample Pest. Extraction SW-846 3510C 12/28/98 1000 Lisa J. Cooke







Page: 1 of 3

LLI Sample No. WW 3062424 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

005-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 005F- SDG#: NBH06-12

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

AS RECEIVED

P.O. LL-2139-A7 Rel. 03886-118-002

| CAT NO. | ANALYSIS NAME | RESULTS D | METHOD ETECTION LI | MIT UNITS | |
|--------------------------------------|---|------------------------------|--------------------------------------|--|---|
| 1749 1751 1753 1055 0173 | Cadmium Chromium Copper Lead (furnace method) PCBs in Water | N.D. N.D. N.D. N.D. | 0.0017 0.0054 0.0058 0.0019 | mg/l mg/l mg/l mg/l See Page | 2 |

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:14:31 D 0002 24 at (717) 656-2300 REP 135166 646255 288 15.00 00020200 ASR000

Lancaster Laboratories 2425 New Holland Fike MEMBER PO Box 12425 Tancaster PA 17605-2425 17 C56-2300 Fax 710-656-2681 Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis





Page: 2 of 3

LLI Sample No. WW 3062424 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

005-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

005F- SDG#: NBH06-12

CAT NO. ANALYSIS NAME

PCBs in Water

| 0639 | PCB-1016 |
|------|----------|
| 0640 | PCB-1221 |
| 0641 | PCB-1232 |
| 0642 | PCB-1242 |
| 0643 | PCB-1248 |
| 0644 | PCB-1254 |
| 0645 | PCB-1260 |

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

| AS | RECEIVED | |
|---------|-------------|------------|
| | METHOD | |
| RESULTS | DETECTION I | IMIT UNITS |
| | | |
| | | |
| | | |
| N.D | . 0.10 | ug/l |
| | | |
| N.D | | ug/1 |
| N.D. | . 0.10 | uq/l |
| N.D. | . 0.10 | ug/1 |
| N.D. | 0.10 | ug/1 |
| N.D | | ug/l |
| | | |
| N.D. | . 0.10 | ug/l |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300



Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs

Respectfully Submitted

LABORATORY CHRONICLE

Page: 3 of 3



LLI Sample No. WW 3062424 Collected: 12/21/98 at 13:20 by AE

Submitted: 12/23/98

005-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

005F- SDG#: NBH06-12

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|-----------|-------------------------------|--------------|-------|------------------------------|------------------------|
| 1749 | Cadmium | SW-846 6010B | 1 | 12/29/98 2258 | Donna R. Sackett |
| 1751 | Chromium | SW-846 6010B | 1 | 12/29/98 2258 | Donna R. Sackett |
| 1753 | Copper | SW-846 6010B | 1 | 12/29/98 2258 | Donna R. Sackett |
| 1848 | WW SW846 ICP Digest (tot rec) | SW-846 3005A | 1 | 12/28/98 2312 | Annamaria Stipkovits |
| 1055 | Lead (furnace method) | SW-846 7421 | 2 | 01/15/99 1450 | Julie A. Slaughenhoupt |
| 5704 | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | 12/28/98 2312 | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 2111 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | 1 | 12/28/98 0700 | Nathaniel R. Kurtz |





Page: 1 of 3

LLI Sample No. WW 3062425 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

006-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

006-- SDG#: NBH06-13

CAT

NO. ANALYSIS NAME

1749 Cadmium 1751 1753 Chromium

Copper 1055 Lead (furnace method)

0173 PCBs in Water Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD **RESULTS** DETECTION LIMIT UNITS

> N.D. 0.0017 0.0054 0.0058 N.D. mg/l N.D. mg/l N.D.WT 0.0019 mq/l

See Page 2

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 EP 135166 646255 Tan H. Vo лап н. Vo 04:15:06 D 0002 24 REP 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Lancaster Laboratories MEMBER 240 New Holland Pike 10 Fox 1,425 Tancardet F/- 17605-2425 1366, 300 Fax 717-656-2681





Page: 2 of 3

LLI Sample No. WW 3062425 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

006-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

006-- SDG#: NBH06-13

CAT NO.

O. ANALYSIS NAME

PCBs in Water

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260 Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD
RESULTS DETECTION LIMIT UNITS

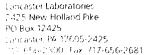
N.D. 0.098 ug/l N.D. 0.098 ug/l N.D. 0.098 ug/l

N.D. 0.098 ug/l N.D. 0.098 ug/l N.D. 0.098 ug/l N.D. 0.098 ug/l N.D. 0.098 ug/l

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs







their reverse ride for explanation of symbols and abbreviations

LABORATORY CHRONICLE

Page: 3 of 3



LLI Sample No. WW 3062425 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98

006-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

006-- SDG#: NBH06-13

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

ANALYSIS CAT TRIAL ID DATE AND TIME **ANALYST** METHOD ANALYSIS NAME NO 12/29/98 2121 Christine R. Fritz SW-846 6010B 1749 Cadmium 12/29/98 2121 Christine R. Fritz 12/29/98 2121 Christine R. Fritz 1 SW-846 6010B 1751 Chromium SW-846 6010B 1 1753 Copper 12/28/98 1815 Marie D. Kimmel 1 1848 WW SW846 ICP Digest (tot rec) SW-846 3005A 01/15/99 1200 Julie A. Slaughenhoupt 12/28/98 1815 Marie D. Kimmel SW-846 7421 1055 Lead (furnace method) 5704 WW/TL SW 846 GFAA Digest tot 1 SW-846 3020A 12/29/98 2224 Rick Shober 0173 PCBs in Water SW-846 8082 12/28/98 1000 Lisa J. Cooke 0817 Water Sample Pest. Extraction SW-846 3510C

P.O. LL-2139-A7

Rel. 03886-118-002



Page: 1 of 3

LLI Sample No. WW 3062426 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

1/30/99 Discard:

006-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

006F- SDG#: NBH06-14

ANALYSIS NAME

Cadmium

Copper

Chromium

CAT

NO.

1749

1751

1753

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

N.D. 0.0017 mg/1N.D. 0.0054 mg/l 0.0058 N.D. mg/1

1055 Lead (furnace method) N.D. 0.0019 mg/l 0173 PCBs in Water See Page

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO 1 COPY TO Roy F. Weston, Inc. Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:15:43 D 0002 at (717) 656-2300 REP 135166 646255 24 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis







Page: 2 of 3

LLI Sample No. WW 3062426 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

006-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

006F- SDG#: NBH06-14

CAT

NO. ANALYSIS NAME

0639 PCB-1016 0640 PCB-1221 0641 PCB-1232 0642 PCB-1242 0643 PCB-1248 0644 PCB-1254 0645 PCB-1260

PCBs in Water

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

METHOD **RESULTS** DETECTION LIMIT UNITS

AS RECEIVED

N.D. 0.097 ug/1 N.D. 0.097 ug/1 N.D. 0.097 ug/1 N.D. 0.097 ug/1 ug/1 N.D. 0.097 N.D. 0.097 ug/1 N.D. 0.097 ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

> Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs









Page: 3 of 3

LLI Sample No. WW 3062426 Collected: 12/21/98 at 09:30 by AE

Submitted: 12/23/98

006-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

006F- SDG#: NBH06-14

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYSIS ID DATE AND TIME | ANALYST |
|-----------|---|-----------------------------|--------|------------------------------|--|
| 1749 | Cadmium | SW-846 6010B | 1 | 12/29/98 2302 | Donna R. Sackett |
| 1751 | Chromium | SW-846 6010B | 1 | | Donna R. Sackett |
| 1753 | Copper | SW-846 6010B | 1 | | Donna R. Sackett |
| 1848 | WW SW846 ICP Digest (tot rec) | SW-846 3005A | 1 | | Annamaria Stipkovits |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | Julie A. Slaughenhoupt Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | 12/30/98 0419 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | 1 | 12/28/98 0700 | Nathaniel R. Kurtz |



Page: 1 of 3

LLI Sample No. WW 3062427 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

1/30/99 Discard:

007-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

007-- SDG#: NBH06-15

CAT

NO. ANALYSIS NAME

1749 Cadmium 1751 Chromium

Copper 1753 1055 Lead (furnace method)

0173 PCBs in Water Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD

RESULTS DETECTION LIMIT UNITS

> N.D. 0.0017 mg/1N.D. 0.0054 mg/1mg/1 N.D. 0.0058 N.D. UT 0.0019 mg/1

See Page 2

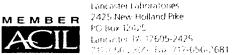
1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300 Tan H. Vo 04:16:23 D 0002 24 REF 288 15.00 00020200 ASR000 REP 135166 646255

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis









Page: 2 of 3

LLI Sample No. WW 3062427 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98 Reported: 1/22/99 Discard: 1/30/99

007-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 007-- SDG#: NBH06-15

Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

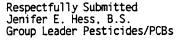
AS RECEIVED

Account No: 08947

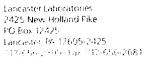
P.O. LL-2139-A7 Rel. 03886-118-002

| CAT NO. | ANALYSIS NAME | RESULTS | METHOD DETECTION L | IMIT UNITS |
|--|--|--|--|--|
| PCBs | in Water | | | |
| 0639 0640 0641 0642 0643 0644 0645 | PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260 | N.D. N.D. N.D. N.D. N.D. N.D. | 0.096 0.096 0.096 0.096 0.096 0.096 | ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo $$\rm at\ (717)\ 656\text{-}2300$









Page: 3 of 3



LLI Sample No. WW 3062427 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98

007-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

007-- SDG#: NBH06-15

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANALYS ID D | IS ATE AND TIME | ANALYST |
|------------------------------|--|--|-------------|----------------|--------------------------------|---|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 | | 12/29/98 2125 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | ! | 01/15/99 1210 12/28/98 1815 | Julie A. Slaughenhoupt Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | | 12/29/98 2241 12/28/98 1000 | Rick Shober Lisa J. Cooke |



P.O. LL-2139-A7 Rel. 03886-118-002



Page: 1 of

LLI Sample No. WW 3062428 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

007-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 007F- SDG#: NBH06-16

Lead (furnace method)

ANALYSIS NAME

PCBs in Water

Cadmium

Chromium

Copper

CAT

NO.

1749

1751

1753

1055 0173

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

N.D. 0.0017 mg/10.0054 N.D. mg/1N.D. 0.0058 mg/1

0.0019 mg/l N.D. See Page

This sample was field filtered for dissolved metals and PCBs.

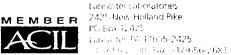
1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative at (717) 656-2300 REP 135166 646255 Tan H. Vo 04:17:03 D 0002 24 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis









Page: 2 of

LLI Sample No. WW 3062428 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

007-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

007F- SDG#: NBH06-16

CAT

ANALYSIS NAME NO.

0639 PCB-1016 PCB-1221 PCB-1232 0640 0641 PCB-1242 0642 0643 PCB-1248 PCB-1254 0644 0645 PCB-1260

PCBs in Water

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD

RESULTS DETECTION LIMIT UNITS

| N.D. N.D. N.D. N.D. | 0.096 0.096 0.096 0.096 | ug/1 ug/1 ug/1 ug/1 |
|------------------------------|----------------------------------|------------------------------|
| N.D. | 0.096 | ug/1 |
| N.D. | 0.096 | ug/1 |
| N.D. | 0.096 | ug/1 |

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

> Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs









Page: 3 of 3

LLI Sample No. WW 3062428 Collected: 12/21/98 at 11:30 by AE

Submitted: 12/23/98

007-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE 007F- SDG#: NBH06-16

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL ID | ALYSIS DATE AND TIME | ANALYST |
|--------------|--|--|------------------|--------------------------------|--|
| 1753 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | 12/29/98 2306 | Donna R. Sackett Donna R. Sackett Donna R. Sackett Annamaria Stipkovits |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | Julie A. Slaughenhoupt Annamaria Stipkovits |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | 12/30/98 0436 12/28/98 0700 | Rick Shober Nathaniel R. Kurtz |





Page: 1 of 3

LLI Sample No. WW 3062429 Collected: 12/21/98 at 10:00 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

202-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

202-- SDG#: NBH06-17

CAT

NO. ANALYSIS NAME

1749 Cadmium 1751 Chromium

1753 Copper

1055 Lead (furnace method)

0173 PCBs in Water Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

AS RECEIVED

METHOD

RESULTS **DETECTION LIMIT UNITS**

> N.D. 0.0017 mg/1N.D. 0.0054 mg/l N.D. (0.0058 N.D. (0.0019 mg/l mq/1

See Page 2

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300 04:17:42 D 0002 24 REP 135166 646255 288 15.00 00020200 ASR000

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax 717-656-7681



P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of 3

LLI Sample No. WW 3062429 Collected: 12/21/98 at 10:00 by AE

Submitted: 12/23/98 Reported: 1/22/99

Discard: 1/30/99

202-1298 Grab Water Sample

New Bedford Harbor - MA -USACE

202-- SDG#: NBH06-17

ANALYSIS NAME

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

ug/1

ug/1

ug/1

ug/1

ug/1

ug/1

ug/1

Account No: 08947

Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

NO.

PCB-1016 0639 N.D. 0.10 PCB-1221 PCB-1232 0640 N.D. 0.10 0641 N.D. 0.10 PCB-1242 0642 N.D. 0.10 0643 PCB-1248 N.D. 0.10 0644 PCB-1254 N.D. 0.10 0645 PCB-1260 N.D. 0.10

> Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

> > Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs







Page: 3 of 3

LLI Sample No. WW 3062429 Collected: 12/21/98 at 10:00 by AE

Submitted: 12/23/98

202-1298 Grab Water Sample

New Bedford Harbor - MA -USACE 202-- SDG#: NBH06-17

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANAL ID | YSIS DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|------------|--------------------------------|---|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 2129 12/29/98 2129 | Christine R. Fritz Christine R. Fritz Christine R. Fritz Marie D. Kimmel |
| | Lead (furnace method) WW/TL SW 846 GFAA Digest tot | SW-846 7421 SW-846 3020A | 2 1 | | 01/15/99 1220 12/28/98 1815 | Julie A. Slaughenhoupt Marie D. Kimmel |
| 0173 0817 | PCBs in Water Water Sample Pest. Extraction | SW-846 8082 SW-846 3510C | 1 | | 12/29/98 2258 12/28/98 1000 | |

Analysis Report



1 of 3 Page:

LLI Sample No. WW 3062430 Collected: 12/21/98 at 10:00 by AE

Submitted: 12/23/98 Reported: 1/22/99

1/30/99 Discard:

202-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

202F- SDG#: NBH06-18*

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

AS RECEIVED

Manchester NH 03101-1501

P.O. LL-2139-A7 Rel. 03886-118-002

METHOD CAT **RESULTS** DETECTION LIMIT UNITS ANALYSIS NAME NO. N.D. 0.0017 mg/11749 Cadmium N.D. 0.0054 mg/11751 Chromium N.D. 0.0058 mg/1 1753 Copper √ ŏ.0019 1055 Lead (furnace method) N.D. 74] mg/1See Page 2 0173 PCBs in Water

This sample was field filtered for dissolved metals and PCBs.

1 COPY TO Roy F. Weston, Inc. 1 COPY TO Data Package Group

ATTN: Mr. Al Easterday

Questions? Contact your Client Services Representative Tan H. Vo 04:18:22 D 0002 24 REF 288 15.00 00020200 ASR000 at (717) 656-2300 REP 135166 646255

> Respectfully Submitted Robert Strocko, Jr., B.S. Group Leader, Metals Analysis



Analysis Repor

P.O. LL-2139-A7

Rel. 03886-118-002



Page: 2 of 3

LLI Sample No. WW 3062430 Collected: 12/21/98 at 10:00 by AE

Discard:

Submitted: 12/23/98 Reported: 1/22/99 1/30/99

202-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

202F - SDG#: NBH06-18*

ANALYSIS NAME

AS RECEIVED

METHOD RESULTS DETECTION LIMIT UNITS

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street

Manchester NH 03101-1501

PCBs in Water

CAT

NO.

0639 PCB-1016 N.D. 0640 PCB-1221 N.D. 0641 PCB-1232 N.D. N.D. 0642 PCB-1242 0643 PCB-1248 N.D. 0644 PCB-1254 N.D. 0645 PCB-1260 N.D.

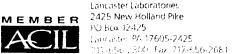
0.099 ug/1 0.099 ug/1

0.099 ug/1 0.099 ug/1 0.099 ug/1 0.099 ug/1 0.099 ug/1

Questions? Contact your Client Services Representative Tan H. Vo at (717) 656-2300

> Respectfully Submitted Jenifer E. Hess, B.S. Group Leader Pesticides/PCBs







Analysis Repor

LABORATORY CHRONICLE

Page: 3 of 3



LLI Sample No. WW 3062430 Collected: 12/21/98 at 10:00 by AE

Submitted: 12/23/98

202-1298 Filtered Grab Water Sample

New Bedford Harbor - MA -USACE

202F - SDG#: NBH06-18*

| CAT NO | ANALYSIS NAME | METHOD | TRIAL | ANAL ID | YSIS DATE AND TIME | ANALYST |
|------------------------------|--|--|------------------|------------|--|------------------------|
| 1749 1751 1753 1848 | Cadmium Chromium Copper WW SW846 ICP Digest (tot rec) | SW-846 6010B SW-846 6010B SW-846 6010B SW-846 3005A | 1 1 1 1 | | 12/29/98 2311 12/29/98 2311 12/29/98 2311 12/28/98 2312 | Donna R. Sackett |
| 1055 | Lead (furnace method) | SW-846 7421 | 2 | | 01/15/99 1520 | Julie A. Slaughenhoupt |
| 5704 | WW/TL SW 846 GFAA Digest tot | SW-846 3020A | 1 | | 12/28/98 2312 | Annamaria Stipkovits |
| 0173 | PCBs in Water | SW-846 8082 | 1 | | 12/30/98 0454 | Rick Shober |
| 0817 | Water Sample Pest. Extraction | SW-846 3510C | 1 | | 12/28/98 0700 | Nathaniel R. Kurtz |

Account No: 08947 Roy F. Weston, Inc. 1 Wall Street Manchester NH 03101-1501

BLANKS

Lab Name: LANCASTER_LABORATORIES___

SDG No.: NBH06

Preparation Blank Matrix (soil/water): WATER_

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

| Analyte | Initial Calib. Blank (ug/L) | Cont | | nuing Cali Blank (ug/ | | ation | c | Prepa- ration Blank C | м |
|--|--------------------------------------|----------------------------|---|----------------------------|------------------|----------------------------|---|--|-----------|
| Cadmium_ Chromium_ Copper_ Lead | 0.99 U 1.5 U 1.3 U 0.29 U | 0.99 1.5 1.3 0.29 | U | 0.99 1.5 1.3 0.29 | ם ט ט ט | 0.99 1.5 1.3 0.29 | | 1.700 U 5.400 U 5.800 U 1.900 U | P P P F P |

QUALITY ASSURANCE SUMMARY BLANKS

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Preparation Blank Matrix (soil/water): WATER_

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

| Analyte | Initial Calib. Blank (ug/L) | С | Cont 1 | nuing Cali Blank (ug/ 2 | | ation 3 | С | Prepa- ration Blank C | M | 1 |
|---|--------------------------------------|------------------|----------------------------|-------------------------------|-----------------|------------|-------------|--|------------------|-------------|
| Cadmium_ Chromium_ Copper Lead | | _ _ _ _ | 0.99 1.5 1.3 0.34 | 0.29 | _ _ _ | 0.38 | - - B | 1.700 U 5.400 U 5.800 U 1.900 U | P P P F | - - - |

LABORATORY CONTROL SAMPLE

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Solid LCS Source: _____

Aqueous LCS Source: LLI____

| Analyte | Aque True | ous (ug/I Found | L) %R(1) | True | So Found | lio C | d (mg/kg) Limits | %R |
|---|--------------------------------|-------------------------|----------------------------------|------|-------------|--------------------|---------------------|----|
| Cadmium_ Chromium_ Copper Lead | 50.0 200.0 250.0 20.0 | $\frac{205.50}{251.71}$ | 102.0 102.8 100.7 100.1 | | | - - - | | |

(1) Control Limits: 80-120

LABORATORY CONTROL SAMPLE

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Solid LCS Source:

Aqueous LCS Source: LLI____

| Analyte | Aque True | eous (ug/L) Found %R(1) | | True | So Found | lic | d (mg/kg) Limits | *R |
|---|--------------------------------|------------------------------------|------|------|-------------|-----|---------------------|----|
| Cadmium_ Chromium_ Copper Lead | 50.0 200.0 250.0 20.0 | 50.96 204.06 248.29 19.43 | 99.3 | | | | | |

(1) Control Limits: 80-120

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

CLIENT SAMPLE NO.

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Matrix (Soil/Water): WATER____

00**4--**S

* Solids for sample: 0.0 Concer

Concentration Units (ug/l or mg/kg dry weight): UG/L___

Level (low/med): LOW

| Analyte | м | Sample Result | С | MS Sample Result | С | MSD Sample Result | С | MS Spike Added | MSD Spike Added | MS %R Q | MSD %R | Control Limits | | | Ct1 Lim RPD |
|-----------|----------|------------------|--------|------------------------|---|-------------------------|---|----------------------|-----------------------|------------|-----------|-------------------|-----|----|-------------------|
| Cadmium_ | P_ | 1.7000 | Ū | 51.7700 | - | 50.8700 | - | 50.00 | 50.00 | 103.5 | 101.7 | 75-125 | 1.8 | - | 20 |
| Chromium_ | P_ | 5.4000 | บ | 210.7500 | | 205.4300 | _ | 200.00 | | | 102.7 | 75-125 | 2.6 | -1 | 20 |
| Copper | P_ | 5.8000 | U | 258.4100 | | 251.3600 | _ | 250.00 | 250.00 | 103.4 | 100.5 | 75-125 | 2.8 | | 20_ |
| Lead | F_ | 9.5000 | U | 12.2000 | В | 12.8500 | В | 20.00 | 20.00 | 61.0 N | 64.2 | N 80-120_ | 5.2 | | 20_ |
| | | | $ _ $ | | _ | | _ | | | | | _ | | | |

Note: An (N) in column "Q" indicates a spike recovery that is not within the control limits. An asterisk (*) in column "Q" indicates poor duplicate precision between the matrix spike and the matrix spike duplicate. The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

CLIENT SAMPLE NO.

004F-S

Lab Name: LANCASTER LABORATORIES

SDG No.: NBH06

Matrix (Soil/Water): WATER

* Solids for sample: 0.0

Concentration Units (ug/l or mg/kg dry weight): UG/L___

Level (low/med): LOW

| | | G | | MS | | MSD | | MS | MSD | MS | | MSD | Control Limits | | | Ct1 Lim |
|-----------|----|--------|---|------------------|----|------------------|---|----------------|----------------|-------|---|-------------|-------------------|-------|-----|------------|
| 3-01-0 | м | Sample | | Sample Bosult | ام | Sample Result | c | Spike Added | Spike Added | #B | ۸ | MSD ♣R O | l | RPD | - 1 | RPD |
| Analyte | M | Result | ٦ | Result | ٦ | vezair | ۲ | nuueu | Audeu | AV. | ۲ | A. Q | | KED | × | RED |
| Cadmium_ | P_ | 1.7000 | ซ | 50.9600 | | 50.6700 | | 50.00 | 50.00 | 101.9 | _ | 101.3 | 75-125_ | 0.6 | | 20_ |
| Chromium_ | P_ | 5.4000 | ט | 206.3800 | | 205.8500 | _ | 200.00 | 200.00 | 103.2 | _ | 102.9 | 75-125_ | 0.3 | _ | 20_ |
| Copper | P_ | 5.8000 | ט | 256.5500 | _ | 256.8500 | _ | 250.00 | 250.00 | 102.6 | _ | 102.7 | 75-125_ | 0.1 | _ | 20_ |
| Lead | F_ | 9.5000 | ט | 17.7500 | | 27.5500 | _ | 20.00 | 20.00 | 88.8 | _ | 137.8 N | 80-120_ | _43.3 | * | 20_ |
| | | | | | _ | | | | | | | | | | | |

Note: An (N) in column "Q" indicates a spike recovery that is not within the control limits. An asterisk (*) in column "Q" indicates poor duplicate precision between the matrix spike and the matrix spike duplicate. The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

DUPLICATES

CLIENT SAMPLE NO.

004--D

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Matrix (soil/water): WATER_____

% Solids for Sample: 0.0

Level (low/med):

LOW

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L___

| Analyte | Control Limit | Sample (| s) c | Duplicate (D) C | RPD | Q | м |
|---------------------------|------------------|----------|-------------------------------|--|-----|---|---------------------------------------|
| CadmiumChromiumCopperLead | | 5 5 | .7000 U .4000 U .8000 U | 1.7000 U 5.4000 U 5.8000 U 9.5000 U | | | P P P P P P P P P P P P P P P P P P P |

An asterisk(*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ). The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary. NOTE:

DUPLICATES

CLIENT SAMPLE NO.

004F-D

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Matrix (soil/water): WATER_____

Level (low/med):

LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L___

| Analyte Cadmium_ Chromium_ Copper | Control Limit | Sample (S) C 1.7000 U 5.4000 U 5.8000 U | Duplicate (D) C 1.7000 U 5.4000 U 5.8000 U | RPD | Q | ㅋ - - - - - - |
|------------------------------------|------------------|--|---|-----|---|------------------------------|
| Copper | | 9.5000 U | 9.5000 | | | |

NOTE: An asterisk(*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ). The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

SERIAL DILUTIONS

CLIENT SAMPLE NO.

004-- L

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Matrix (soil/water): WATER_____

Level (low/med): LOW_

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) C | Serial Dilution Result (S) C | % Differ- ence | Q | м |
|--|--------------------------------|------------------------------------|----------------------|---------|----------------------|
| Cadmium Chromium_ Copper Lead | 1.70 U 5.40 U 5.80 U | 8.50 U 27.00 U 29.00 U | | 1 1 1 1 | P_ P_ P_ NR |

NOTE: An (E) in column "Q" indicates the presence of a chemical or physical interference in the matrix during analysis (% Difference > 10% when (I) > or = 50x MDL for ICP or (I) > or = 25x MDL for GFAA).

SERIAL DILUTIONS

CLIENT SAMPLE NO.

004F- L

Lab Name: LANCASTER_LABORATORIES____

SDG No.: NBH06

Matrix (soil/water): WATER_____

Level (low/med): LOW

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) C | Serial Dilution Result (S) C | % Differ- ence | Q | м |
|---------------------------|--------------------------------|------------------------------------|----------------------|---------------|----------------------|
| CadmiumChromiumCopperLead | 1.70 U 5.40 U 5.80 U | 8.50 U 27.00 U 29.00 U | | - - - | P_ P_ P_ NR |

NOTE: An (E) in column "Q" indicates the presence of a chemical or physical interference in the matrix during analysis (% Difference > 10% when (I) > or = 50x MDL for ICP or (I) > or = 25x MDL for GFAA).

Analysis Request/ Environmental Services Chair of Cusiocy



For Lancaster Laboratories Fed Ex Air bill No. 80 7531288527 Acct. # 8947 Sample # 30(240) - 450

Please print. Instructions on reverse side correspond with circled numbers. For lab use only **Analyses Requested** Client: Ray F. Weston Acct. #: _______
Project Name/#: New Barkard Harbor PWSID #: _____ SCR#: 1120383 Project Manager: Alexander Easterday P.O.#_____ Sampler: Al Easterday / Scott Campbell Quote #:____ Name of state where samples were collected: Date Collected Sample Identification Collected | A- Proserved with 21 Dec 1994 1025 Sodium Thiosalfate 1025 B- Preserved with 1520 1530 1315 1320 0930 006-1798 007-1298 1130 202-1298 1000 Time Received by: Date Relinquished by: Time Turnaround Time Requested (TAT) (please circle): Normal 2:25 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date results are needed: Standard TAT Relinquished by: Received by: Rush results requested by (please circle): Phone Fax
Phone #: 63 656 5400 Fax #: 603 656 5401 1400 Time Time Received by: Relinguished by: 8 Data Package Options (please circle if requested) SDG Complete? Type VI (Raw Data) Yes No **OC Summary** Date Time Time Received by: Date Relinquished by: (type I (Tier I) GLP Site-specific QC required? Yes No Type II (Tier II) Other (If yes, indicate QC sample and submit triplicate volume.) Date Time Time Received by Relinguished by: Date Type III (NJ Red. Del.) Internal Chain of Custody required? Yes No Type IV (CLP)